



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vignina 22313-1450 www.nspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/964,160	09/26/2001	John A. M. Cameron	WEAT/0150	9581
7:	590 07/10/2003			
MOSER, PATTERSON & SHERIDAN, L.L.P. Suite 1500 3040 Post Oak Blvd.			EXAMINER	
			HALFORD, BRIAN D	
Houston, TX 77056			ART UNIT	PAPER NUMBER
			3672	
			DATE MAILED: 07/10/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

			QK
		Application No.	Applicant(s)
•	e	09/964,160	CAMERON, JOHN A. M.
٤	Office Action Summary	Examiner	Art Unit
		Brian D Halford	3672
	The MAILING DATE of this communication a	ppears on the cover sheet wit	th the correspondenc address
THE - Exte after - If the - If NC - Failu - Any I	ORTENED STATUTORY PERIOD FOR REP MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. It period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory perion to reply within the set or extended period for reply will, by staturely received by the Office later than three months after the mailed patent term adjustment. See 37 CFR 1.704(b).	I. 1.136(a). In no event, however, may a reply within the statutory minimum of thirty d will apply and will expire SIX (6) MONTute, cause the application to become ABA	rply be timely filed  (30) days will be considered timely.  FHS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).
1)	Responsive to communication(s) filed on 28	3 April 2003 .	
2a)□		This action is non-final.	
3)□	Since this application is in condition for allow		ters prosecution as to the merits is
,	closed in accordance with the practice unde ion of Claims		
4)⊠	Claim(s) 1-24 is/are pending in the application	on.	
	4a) Of the above claim(s) is/are withdr	awn from consideration.	
5)	Claim(s) is/are allowed.		
6)⊠	Claim(s) 1-24 is/are rejected.		
7) 🗆	Claim(s) is/are objected to.		
8)□	Claim(s) are subject to restriction and	or election requirement.	
•	on Papers	·	
9) 🔲 🤈	The specification is objected to by the Examin	ner.	
10) 🗌 🤈	The drawing(s) filed on is/are: a)□ acc	epted or b) objected to by th	ne Examiner.
	Applicant may not request that any objection to t	the drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).
11) 🔲 🤈	The proposed drawing correction filed on	is: a)□ approved b)□ di	sapproved by the Examiner.
	If approved, corrected drawings are required in r	reply to this Office action.	
12) 🗌	The oath or declaration is objected to by the E	Examiner.	
Priority ι	ınder 35 U.S.C. §§ 119 and 120		·
13)	Acknowledgment is made of a claim for foreign	gn priority under 35 U.S.C. §	119(a)-(d) or (f).
a)[	☐ All b)☐ Some * c)☐ None of:		
	1. Certified copies of the priority documer	nts have been received.	
	2. Certified copies of the priority documer	nts have been received in Ap	oplication No
* 5	3. Copies of the certified copies of the pri application from the International B see the attached detailed Office action for a lis	Bureau (PCT Rule 17.2(a)).	
_	acknowledgment is made of a claim for domes	•	
_a	) ☐ The translation of the foreign language p Acknowledgment is made of a claim for dome:	rovisional application has be	en received.
Attachmen	-	one priority under do 0.0.0.	55 120 and/or 121.
1)  Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Ir	nummary (PTO-413) Paper No(s)  Informal Patent Application (PTO-152)

Art Unit: 3672

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castano-Mears et al. in view of Evans et al. Castano-Mears et al. disclose a downhole expandable well screen that expands to substantially contact the wall of a wellbore. Furthermore, as stated in lines 19-25 of Column 1, the expandable well screen finds employment with productive, relatively unconsolidated downhole formations. As shown in Figures 15-18 and discussed in lines 8-40 of Column 11, the expandable well screen (166) contains expandable metal tubular ribs (172), a perforated base pipe (168) and a filtering media (170). Though not illustrated, the expandable well screen (166) may contain a protective outer shroud as disclosed in last two paragraphs of column 4, lines 18-21 of column 7 and lines 29-41 of column 10. Some of the ribs are utilized as housings to convey a myriad of instrumentation lines. Lines 36-40 of the aforementioned column clearly state that any type of line may be inserted through the hollow ribs (172). Figure 18 lucidly depicts a hollow rib (172) containing a hydraulic or chemical injection line (176), an electrical line (178) and a fiber optic line (180).

Art Unit: 3672

However, Castano-Mears et al. disclose in lines 41-45 of Column 11 that the ribs or housings (172) are designed to collapse under excessive expansion force. As stated in lines 50-54 of the same column, the collapse of the sacrificial ribs (172) under excessive expansion force preserves the structural integrity of the filtering media (170). Thus, the expandable well screen (166) is retained for future use. Castano-Mears et al. do not disclose, however, a crescent-shaped housing wherein the housing is placed between the expandable well screen and the wellbore. The patent to Evans et al. disclose an encapsulated control line for employment in downhole applications. Evans et al. teach in lines 54-61 of column 1 that crushed control lines entail costly wellbore operations that involve the pulling of the production tubing to repair the damaged lines. As such, Evans et al. is primarily concerned with preserving the integrity of control lines during downhole operations. Evans et al. disclose the invention in columns 1-4; furthermore, the invention is depicted in Figures 1 and 2. As discussed in lines 45-61 and 7-14 of respective columns 1 and 2, an encapsulation for control lines fabricated from elastomeric material is disclosed that is capable of withstanding excessive radial expansion forces. As such, the control lines enveloped by the elastomeric material remain intact while the encapsulation is subject to excessive radial expansion forces. As mentioned in lines 3-8, 30 and 34-68 of column 3, the encapsulation, generally designated by the letter, "A" contains a crescentshaped sheath or housing (14) of elastomeric material and two metal tubulars (12, 13) that serve as fluid control lines. Evans et al. outline additional advantages of the invention in lines 47-59 of column 4. Therefore, it would have

Art Unit: 3672

been obvious to a person having ordinary skill in the art, at the time the invention was made, to convey the instrumentation lines of Castano-Mears *et al.* in the encapsulation or line housing of Evans *et al.*, wherein the encapsulation is placed between the tool and the wall of the wellbore of Castano-Mears *et al.*, as taught by Evans *et al.*, to afford the structural integrity of instrumentation lines if the ribs of Castano-Mears *et al.* fail under excessive expansion force.

## Response to Arguments

3. Applicant's arguments with respect to claims 1-12 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Halford whose telephone number is (703) 306-0556. The examiner can normally be reached on M-F 10:30-8:00; alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J Bagnell can be reached on (703) 308-2151. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Art Unit: 3672

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1020.

Brian D Halford Examiner Art Unit 3672

bdh bbh July 8, 2003

> William Neuder Primary Examiner